

In the Specification

Please amend the specification as follows:

[0030] FIG. 1 illustrates an advantageous embodiment of the video imaging system 100. A camera head 105 is provided having an imager 115 for receiving photonic energy 110 reflected off a viewed object (not shown). The imager 115 utilizes timing signals generated in timing generator 125 to develop output analog image data corresponding to the received photonic energy 110. The imager 115 converts the received photonic energy 110 to output analog image data received by analog-to-digital converter 120. The analog-to-digital converter 120 in turn converts the received analog image data to digital image data. The digital image data is then fed into multiplexer 130. The timing generator 125 also provides an ~~and~~ input to multiplexer 130. A processor 135, having access to a memory device 140 is also located in the camera head 105. The processor 135 may send camera information stored in memory device 140 to multiplexer 130. The multiplexer 130, multiplexes the various received input signals, generating a multiplexed digital signal. The output of multiplexer 130 is connected to serializer 145, also located in camera head 105. The output of serializer 145 is then connected to digital serial driver 150. The output of digital serial driver 150 is coupled to camera control unit 160 via coupling element 155. Camera control unit 160 processes the received signal via processor 165. The processor 165 utilizes timing signals generated in timing generator 125 to process the received image data in order to generate video output 170.

[0034] FIG. 4 illustrates an advantageous embodiment of the video imaging system 400. A camera head 405 is provided having an imager 415 for receiving photonic energy 410 reflected off a viewed object (not shown). The imager 415 develops output image data corresponding to the received photonic energy 410. The imager 415 converts the received photonic energy 410 to output image data received by multiplexer 420, also located in camera head 405. A memory device 425, located in the camera head 405 ~~405~~, is also coupled to multiplexer 420. The multiplexer 420, multiplexes the various received input signals, generating a multiplexed signal. The output of multiplexer 420 is coupled to camera control unit 435 via coupling element 430. Camera control unit 435 processes the received signal to generate video output 440.